

ARGUMENTS/REMARKS

Applicants would like to thank the examiner for the careful consideration given the present application. The application has been carefully reviewed in light of the Office action, and amended as necessary to more clearly and particularly describe and claim the subject matter which applicants regard as the invention.

Claims 1-24 remain in this application. Note that the claims have been amended solely for editorial corrections, not for reasons of patentability and not in response to any of the cited references.

Claims 1 and 13 were rejected under 35 U.S.C. §102 as being anticipated by Csapo *et al.* (U.S. 6,411,825). For the following reasons, the rejection is respectfully traversed.

Claim 1, as amended, recites a step of “controlling a digital-to-analog converter for generating an analog baseband signal to be input to a modulator for frequency-converting a transmission signal to a signal in an IF band” and also recites a step of “controlling a plurality of variable power amplifiers for variably amplifying the transmission signal modulated by the modulator”.

Claim 13, as amended, recites a device comprising a variable power amplification unit which includes a “digital-to-analog converter for generating an analog transmission signal” and a “modulator for inputting said analog transmission signal and frequency-converting the transmission signal to a signal in an IF band”. The amplification unit also includes a “plurality of variable power amplifiers for variably amplifying the transmission signal modulated by the modulator. Finally, the device also has a “variable power amplification control unit for controlling the variable power amplification unit”

The cited reference does not teach the limitations of claims 1 or 13.

The Examiner cites column 9, lines 21-28, as teaching the control of a digital to analog (D/A) converter. However, the cited paragraph nowhere mentions a D/A converter, and figure 4 does not show a D/A converter.

The Examiner also cites figure 4, item 78, as teaching a modulator. However, there is no teaching that an analog baseband signal output from a D/A converter is input to the

modem 78 cited by the examiner.

Finally, the Examiner cites claims 1 and 4 of Csapo as teaching a plurality of power amplifiers, but applicant notes that the cited Csapo claims also recite that the power amplifiers are each connected to a *different* transceiver circuit. Yet, claims 1 and 13 of the present application specifically recite that the plurality of variable power amplifiers variably amplify *the* transmission signal modulated by the modulator, and thus they amplify the *same* base signal, not different signals from different circuits. Accordingly, one skilled in the art would understand that the reference teaches that each power amplifier amplifies a *different* base signal (each from the respective transceiver circuit), not the *same* base signal as in the invention. At the very least, the reference does not teach amplifying the transmission signal modulated by the modulator, as recited in the claims.

Consequently, for any combination of the above reasons, the cited reference fails to anticipate either claim 1 or 13, and thus those claims are patentable over the reference.

Claims 2-3, 5-6, 7-9, 11-12, 14-15, 17-18, 19-21, and 23-24 were rejected under 35 U.S.C. §103(a) as being unpatentable over Csapo in view of Fujita (EP 888,250 A2). For the following reasons, the rejection is respectfully traversed.

Fujita does not overcome the shortcomings of the Csapo reference. Accordingly, claims 2-6, which depend, directly or indirectly, on claim 1, and claims 14-18, which depend, directly or indirectly on claim 13, are thus patentable over the combination of references for at least the same reasons as the parent claim.

Further, claim 7 recites a “power amplifier for amplifying a transmission signal via separate bias systems” and claim 19 recites a “plurality of voltage controllers for controlling the power amplifier via separate bias systems”. Thus, both claims recite that an amplifier is controlled by more than one bias system.

The Examiner cites items 26, 24, 25, and 9' in FIG. 4 as teaching separate bias systems. However, one skilled in the art would know that Fujita teaches only a single bias system for each amplifier because any one power amplifier (3, 4) has only a single input from a single bias controller (24, 25, respectively), and thus the reference teaches only a single bias system for any given amplifier. The fact that the reference shows multiple bias control systems (24, 25) does not suggest a power amplifier having separate bias systems.

In addition, with regard to claims 2, 8, 14, and 20, the Examiner argues that it is inherent to arrange amplifiers in linear and/or parallel positions in order to adjust control ratios. Applicant disputes this statement. First, applicant is not claiming linear or parallel positions, but is claiming serial or parallel control of a plurality of power amplifiers.

Further, it is not enough to merely allege that a function or feature is "inherent". The Examiner must provide evidence and or rationale to show inherency. MPEP §2112. The fact that a certain result or characteristic *may* occur or be present in the prior art is *not sufficient* to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art) (emphasis added); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). "To establish inherency, the extrinsic evidence `must make clear that the missing descriptive matter is *necessarily present* in the thing described in the reference, and that it *would be so recognized by persons of ordinary skill*. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' " *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (emphasis added). "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original). See MPEP §2112.

Accordingly, the Examiner has not provided a proper basis for arguing inherency, and the rejection is improper.

With regard to the rejection of claims 3, 9, 15, and 21, the Examiner cites column 13, lines 19-47 as teaching modifying a control ratio according to a detected communication state. However, as discussed above, the reference fails to even suggest a control ratio, let alone modifying one.

With regard to the rejection of claims 5, 11, 17, and 23, yet again, because the references fail to suggest any use of a control ratio, they cannot teach adaptively modifying a control ratio.

With regard to the rejection of claims 6, 12, 18, and 24, the Examiner states that using amplifiers with differing control sensitivities is inherent due to physical conditions (such as position, interference, etc.). Applicant disputes this statement. First, the proper test for inherency has not been satisfied (see argument above). Second, one skilled in the art would know that sensitivity changes due to such physical conditions as described by the Examiner are typically negligible, and in fact, can be compensated for by the amplifier design or its specific use. Thus, the cited property is clearly not “inherent” in amplifiers, and thus the rejection is improper.

Still further, the Examiner has not provided the proper motivation for combining the references. The burden is on the Examiner to make a prima facie case of obviousness (MPEP §2142). To support a prima facie case of obviousness, the Examiner must show that there is some *suggestion* or *motivation* to modify the reference (MPEP §2143.01). The mere fact that references *can* be combined or modified, alone, is not sufficient to establish prima facie obviousness (*Id.*). The prior art must also suggest the *desirability* of the combination (*Id.*). The fact that the claimed invention is within the *capabilities* of one of ordinary skill in the art is not sufficient, by itself, to establish prima facie obviousness (*Id.*).

The Examiner has cited no support for any such suggestion or motivation for the combination from within the references, and neither does the Examiner provide any references supporting any motivation to modify the reference(s) by making the combination.

Merely listing an advantage or benefit of the combination is not sufficient, as some rationale for combining the references must be found in the references themselves, or drawn from a convincing line of reasoning based on established scientific principles practiced by one skilled in the art that some advantage or beneficial result would be produced by the combination (MPEP §2144). Such motivation cannot be found in the application itself, as such hindsight is impermissible; the facts must be gleaned from the prior art. (MPEP §2142, last paragraph).

The Examiner has failed to provide any motivation other than a generalized statement of benefit. Accordingly, the rejection for obviousness is not supported by the Office action and thus the rejection is improper, and should be withdrawn.

Claims 4, 10, 16, and 22 were rejected under 35 U.S.C. §103(a) as being unpatentable

over Csapo in view of Fujita, further in view of Davidovici (US 5,963,583). For the following reasons, the rejection is respectfully traversed.

Davidovici does not overcome the shortcoming of Csapo, nor the combination of Csapo and Fujita, and hence claims 4, 10, 16, and 22, which depend, directly or indirectly, upon one of the claims discussed above, are thus patentable for at least the same reasons as the parent claim.

Further, the Examiner has failed to provide the proper motivation for combining the references, again merely listing a conclusory, generalized benefit. Thus, the rejection is improper, and thus claims 4, 10, 16, and 22 are patentable over the references.

In consideration of the foregoing analysis, it is respectfully submitted that the present application is in a condition for allowance and notice to that effect is hereby requested. If it is determined that the application is not in a condition for allowance, the examiner is invited to initiate a telephone interview with the undersigned attorney to expedite prosecution of the present application.

If there are any additional fees resulting from this communication, please charge same to our Deposit Account No. 16-0820, our Order No. 33677.

Respectfully submitted,

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